



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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REGIONAL
ADMINISTRATOR'S
DIVISION

June 16, 2022

U.S. Army Corps of Engineers, Alaska District
ATTN: CEPOA-PM-C_ER (Ferguson)
P.O. Box 6898
Joint Base Elmendorf-Richardson, Alaska 99506-0898

Dear Matthew Ferguson:

The U.S. Environmental Protection Agency has reviewed the U.S. Army Corps of Engineer Draft Environmental Assessment and Finding of No Significant Impact (for proposed maintenance dredging in Anchorage Harbor (EPA Project Number 22-0031-USACE). EPA has conducted its review pursuant to the National Environmental Policy Act and our review authority under Section 309 of the Clean Air Act. The CAA Section 309 role is unique to EPA and requires EPA to review and comment publicly on any proposed federal action subject to NEPA's environmental impact statement requirement.

The Draft Environmental Assessment (DEA) evaluates the potential environmental impacts associated with proposed maintenance dredging of the federal dredging project in Anchorage at the largest cargo port in Alaska, the Port of Alaska, and the related disposal at the Anchorage in-water disposal area. The DEA identifies and evaluates a No Action Alternative and a Preferred Alternative, which is to perform maintenance dredging of the Anchorage Harbor basin to -35 feet MLLW and dispose of dredged material in the POA open water disposal area located 3,000 feet abeam of the main terminals.

The USACE has the responsibility to maintain the channel and harbor for the POA and, as Anchorage Harbor is designated as a Military Surface Deployment and Distribution Command Strategic Seaport, the maintenance dredging supports national security. EPA has concerns about potential environmental impacts from project activities to several resource areas, including dredged material characterization, air quality, noise, environmental justice, and tribal consultation. Additional analysis may be required to better assess and quantify these impacts and design appropriate mitigation measures to minimize them. The enclosed Detailed Comments provides greater detail of these concerns and recommendations for the Final EA (FEA).

Thank you for the opportunity to review the DEA for this project. If you have questions about this review, please contact Susan Sturges of my staff at (206) 553-2117 and sturges.susan@epa.gov or me, at (206) 553-1774 or at chu.rebecca@epa.gov.

Sincerely,

Rebecca Chu, Chief
Policy and Environmental Review Branch

Enclosure

**U.S. EPA Detailed Comments on the
Maintenance Dredging in Anchorage Harbor DEA
Anchorage, Alaska
June 2022**

Dredged Material Characterization

Background and Context

EPA recommends that additional background information about the sedimentation characteristics be expanded upon when characterizing the proposed project location of Anchorage Harbor dredging and disposal in Knik Arm in Upper Cook Inlet.

EPA also recommends that the FEA expand on the information about the sediment quality and potential contaminants associated with the Port's operations. The project accommodates three dry cargo berths and two petroleum handling facilities. The POA serves as Alaska's regional port and as a Strategic Seaport providing services to approximately 80 percent of the total population of Alaska, including four military installations. The POA facilities include three general cargo terminals, one petroleum/cement terminal, one petroleum only terminal that services the needs of container, liquid bulk, dry bulk, break bulk, dry barge landing, and cruise ships. The area of the proposed dredging is in a highly industrialized area, which likely contributes contaminants to sediments proposed for dredging. Pacific salmon return to Ship Creek, which terminates adjacent to the harbor. Chester Creek, Campbell Creek and Little Campbell Creek pass through other urbanized areas before discharging farther south of Ship Creek.

Dredged Material Sampling and Analysis

Nationally, EPA recommends that the sediment testing protocols and procedures follow the RGL-06-02 (July 6, 2006) Regulatory Guidance Letter: Guidance on Dredged Material Testing for Purposes of Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972¹ and use the Inland Testing Manual.²

EPA Region 10 and the USACE are coordinating regularly to develop a Dredged Material Evaluation Framework (DMEF) for Alaska, and information through this coordination may be useful in developing the FEA. The DMEF includes guidance for sampling of dredged material and the physical, chemical, and biological analytical information needed to determine whether the material is suitable for in-water placement under Section 404 of the Clean Water Act. EPA Region 10 and the USACE utilize the multi-agency 2021 Dredge Material Evaluation and Disposal Procedures User Manual for this effort.³

EPA recommends the NEPA analysis specify that the sampling and analysis plans for sediment will be consistent with the most recent guidance document (e.g. DMMP User Manual) and tailored to the project scope/impact. For example, the DEA includes a 10-year sediment chemistry review cycle, and collection and characterization of the dredged material with respect to applicable sediment evaluation criteria prior to the 2027 dredging season. This is not consistent with the USACE Seattle District's 2021 DMMP User Manual from which the draft Alaska DMEF is modeled. Given the plans for the expanded new Port, the prior and continued use of the site, and the proximity to contaminants of concern from industrial and residential sources, this would include evaluating the sediments for chemicals of concern

¹ <https://usace.contentdm.oclc.org/utis/getfile/collection/p16021coll9/id/1243>.

² <https://www.epa.gov/cwa-404/inland-testing-manual-under-cwa-section-404>.

³ <https://www.nws.usace.army.mil/Missions/Civil-Works/Dredging/User-Manual/>.

more frequently than every ten years. EPA recommends the FEA include an updated summary of the sediment characterization and coordinated sampling strategy for the dredged material.

EPA recommends the USACE coordinate with EPA to determine the appropriate sampling interval based on the DMMP User Manual. EPA is available to engage and coordinate with the USACE on the development of a Sampling and Analysis Plan, per Chapter 5 of the DMMP User Manual, to meet the standards set by the USACE Seattle District and those in-process for the State of Alaska. The DMMP User Manual includes developing a SAP that allocates the harbor sediments into several dredged material management units.

Air Quality

Air Quality Data

The DEA cites older air quality data from a report on EPA's assessment of air quality in 2007.⁴ EPA recommends updating the FEA to include newer available information from a recent EPA air quality assessment report.⁵ The DEA includes 2010 American Lung Association reporting on air quality in U.S. cities, indicating "[t]he American Lung Association ranked Anchorage fourth on the list of cleanest U.S. cities for year-round PM2.5 pollution in their annual report published in 2010." EPA recommends updating the EA's reference to recent American Lung Association reporting for 2022. More recent information shows that the American Lung Association State of the Air identifies Anchorage Municipality as receiving a grade of "F" for 24-hour particulate emissions. This is an issue of concern, since the diesel engine operating the dredging equipment would be an additional source of particulate matter.

EPA also recommends the EA report on monitored carbon monoxide values, which are readily available from Alaska Department of Environmental Conservation.⁶ Since all National Ambient Air Quality Standards are mentioned in the DEA, EPA recommends the FEA report on all ADEC-monitored emissions in the Anchorage area.

The DEA states that "[EPA] requires a demonstration of maintenance for 10 years following re-designation."⁷ EPA notes that a "maintenance" period is 20 years, not 10 years. EPA requires that two 10-year maintenance plans address this maintenance period. EPA recommends the USACE update the text for the FEA to reflect this correction.

Environmental Consequences of the Preferred Alternative

The DEA states that a dredge emitting air pollutants would not be distinguishable from other vessel emissions in the project area.⁸ While it may be true that the operation of a dredge may emit similarly to other vessels in the area, this statement implies that dredging activities would have the same air quality impacts as no dredging activities, which is not the case. The DEA does not include an assessment of the air pollutant emissions from the project's proposed dredge operations. EPA recommends the FEA estimate vessel emissions based on hours of operations using sources of emission factors⁹ and describe mitigation measures necessary to minimize air quality impacts from those emissions.

⁴ DEA, pg. 9.

⁵ <https://www.epa.gov/outdoor-air-quality-data/air-quality-index-report>.

⁶ <https://dec.alaska.gov/air/air-monitoring/>.

⁷ DEA, pg. 9.

⁸ DEA, pg. 26.

⁹ <https://www.epa.gov/state-and-local-transportation/port-emissions-inventory-guidance>.

Noise

The DEA indicates that the POA is an area of relatively high ambient noise levels of both natural and anthropogenic sources.¹⁰ For the Preferred Alternative, the DEA identifies that “[s]uction dredging and clamshell dredging can produce sound pressure levels high enough to injure and drive marine organisms away from the project area, reducing their ability to use resources and potentially increasing mortality.”¹¹ The DEA further states “[t]he Preferred Alternative would not generate sub-surface noise levels exceeding those produced by natural and anthropogenic sources and would not appreciably increase above surface noise levels.”¹² EPA appreciates the inclusion of the site-specific noise data included in Appendix A of the DEA describing impacts of POA maintenance dredging noise on Cook Inlet Beluga Whales. The DEA focuses on noise impacts to marine organisms and does not discuss the potential effects of noise to humans. EPA recommends the FEA expand the noise analysis to include an assessment of potential impacts to neighboring communities or sensitive receptors and if necessary, mitigation measures to minimize impacts to those populations.

Environmental Justice

EPA recommends the FEA assess whether the project could potentially generate impacts to sensitive receptors or neighboring communities that may have environmental justice concerns from dredge operation noise or vessel emissions. To identify where potential environmental justice concerns exist, EPA suggests using two tools: Environmental Justice Screening and Mapping Tool (EJScreen) and the Climate and Economic Justice Screening Tool (CEJST).^{13,14} EPA considers a project to be in an area of potential environmental justice concern when an EJScreen analysis for the impacted area shows one or more of the twelve EJ Indices at or above the 80th percentile in the nation and/or state. At a minimum, EPA recommends an environmental justice analysis consider EJScreen. The CEJST can be used to assist Federal agencies in identifying and defining disadvantaged communities for the purposes of the Justice40 Initiative. With CEJST, USACE could, for example, consider census tracts identified as “disadvantaged” and determine disproportionate impacts by the project. EJScreen and CEJST are complementary tools.

Tribal Consultation

EPA encourages the USACE to consult with potentially impacted Tribes and incorporate feedback from the Tribes when making decisions regarding the project. EPA recommends the FEA describe the issues raised during the consultations and how those issues were addressed.

Additional Comments on Section 3.7 Marine Invertebrates

The DEA states that “Knik Arm has often been described as a ‘sterile’ environment, almost devoid of fish and invertebrates except for anadromous fish moving through the Knik Arm to and from spawning habitat.”¹⁵ This statement is made without any references to substantiate the claim. EPA recommends the sentence be deleted or the FEA provide sources supporting characterizing Knik Arm as “sterile.”

¹⁰ DEA, pg. 9.

¹¹ DEA, pg. 26.

¹² DEA, pgs. 26-27.

¹³ <https://www.epa.gov/ejscreen>.

¹⁴ <https://screeningtool.geoplatform.gov/en/#3/33.47/-97.5>.

¹⁵ DEA, pg.14, Section 3.7, second paragraph.